FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DL	4,276,298	06/30/81	Jones et al.	424	270	
DL	4,369,183	01/18/83	Jones et al.	424	263	
DL	4,499,295	02/12/85	Mueller et al	560	53	
DL	4,551,279	11/05/85	Mueller et al.	260	404	
DL	4,584,397	04/22/86	Mueller et al.	560	75	
DL	4,968,607	11/06/90	Dower et al.	435	69.1	
DL	5,008,245	04/16/91	Digenis et al.	514	18	
DL	5,055,451	10/08/91	Krantz et al.	514	19	
DL	5,081,228	01/14/92	Dower et al.	530	35.1	
DL	5,158,936	10/27/92	Krantz, et al.	514	19	
DL	5,180,812	01/19/93	Dower et al.	530	351	
DL	5,374,623	12/20/94	Zimmerman et al.	514	17	08/20/92
DL	5,411,985	05/02/95	Bills et al.	514	460	05/17/93
DL	5,416,013	05/16/95	Black et al.	435	226	02/18/04
DL	5,430,128	07/04/95	Chapman et al.	530	330	11/21/94
DL	5,434,248	07/18/95	Chapman et al.	530	330	06/02/93
DL	5,462,939	10/31/95	Dolle et al.	514	231.5	05/07/93
DL	5,486,623	01/23/96	Zimmerman et al.	549	417	12/08/93
DL	5,498,616	03/12/96	Mallamo et al.	514	300	11/04/94
DL	5,498,695	03/12/96	Daumy et al.	530	331	12/12/94
DL	5,552,400	09/03/96	Dolle et al.	514	221	06/08/94
DL	5,565,430	10/15/96	Dolle et al.	514	19	08/02/94
DL	5,585,357	12/17/96	Dolle et al.	514	18	01/29/96
DL	5,585,486	12/17/96	Dolle et al.	544	182	05/12/95
DL	5,639,745	06/17/97	Dolle et al.	514	183	05/25/95
DL	5,670,494	09/23/97	Dolle et al.	514	86	11/20/95

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
DL	WO 91/15577	10/17/91	PCT	C12N	9/64		
DL	WO 93/05071	03/18/93	PCT	C07K	13/00		
DL	WO 93/09135	05/13/93	PCT	C07K	5/04		
DL	WO 93/14777	08/05/93	PCT	A61K	07/00		
DL	WO 93/16710	09/02/93	PCT	A61K	37/00		
DL	WO 93/25683	12/23/93	PCT	C12N	15/42		
DL	WO 93/25685	12/23/93	PCT	C12N	15/42		
DL	WO 93/25694	12/23/93	PCT	C12N	15/57		
DL	WO 94/00154	01/06/94	PCT	A61K	39/395		
DL	WO 94/03480	02/17/94	PCT	C07K	5/02		
DL	WO 95/00160	01/05/95	PCT	A61K	37/02		
DL	WO 95/05192	02/23/95	PCT	A61K	38/06		
DL	EP-A-0 275 101	07/20/88	EPO	C07K	5/02		
DL	EP-A-0 410 411	01/30/91	EPO	C07K	5/04		
DL	EP-A-0 417 721	03/20/91	EPO	C07K	5/10		
DL	EP-A-0 479 489	04/08/92	EPO	C07K	5/08		
DL	EP-A-0 504 938	09/23/92	EPO	A61K	37/02		
DL	EP-A-0 519 748	12/23/92	EPO	C07K	5/04		
DL	EP-A-0 525 420	02/03/93	EPO	C07D	307/56		
DL	EP-A-0 528 487	02/24/93	EPO	C07K	5/10		
DL	EP-A-0 529 713	03/03/93	EPO	B01J	20/32		
DL	EP-A-0 533 226	03/24/93	EPO	C07K	5/10		
DL	EP-A-0 533 350	03/24/93	EPO	C12N	15/57		
DL	EP-A-0 547 699	06/23/93	EPO	C07K	5/02		
DL	EP-A-0 618 223	10/05/94	EPO	C07K	5/02		
DL	EP-A-0 623 592	11/09/94	EPO	C07C	271/22		
DL	EP-A-0 623 606	11/09/94	EPO	C07D	307/80		
DL	EP-A-0 628 550	12/14/94	EPO	C07D	237/24		
DL	EP-A-0 644 198	03/22/95	EPO	C07K	5/02		

EXAMINER David Lukton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 165

DL	AU-A-64514/94	12/08/94	AU	~~C07F~~	~~009/32~~	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	D. Alberg & S. Schreiber, "Structure-Based Design of a Cyclophilin-Calcineurin Bridging Ligand", Science, 262, pp. 248-250 (1993)
DL	P. Andrews, "Functional Groups, Drug-Receptor Interactions and Drug Design", Trends Pharmacol. Sci., 7, pp. 148-151 (1986).
DL	K. Appelt et al., "Design of Enzyme Inhibitors Using Iterative Protein Crystallographic Analysis", J. Med. Chem., 34, pp. 1925-1934 (1991)
DL	M. Ator, "Peptide and Non-peptide Inhibitors of Interleukin-1β Converting Enzyme", Cambridge Healthtech Institute (Inflammatory Cytokine Antagonists Targets, Strategies, and Indication), (1994)
DL	M.A. Ator and R.E. Dolle, "Interleukin-1β Converting Enzyme: Biology and the Chemistry of Inhibitors" Curr. Pharm. Design, 1, pp. 191-210 (1995)
DL	E. Baker & J. Drenth, "The Thiol Proteases: Structure and Mechanism", in Biological Macromolecules and Assemblies, 3, pp. 313-368 (F. Jurnak & A. McPherson eds., 1987)
DL	J. Baldwin et al., "Thienothiopyran-2-sulfonamids: Novel Topically Active Carbonic Anhydrase Inhibitors for the Treatment of Glaucoma", J. Med. Chem., 32, pp. 2510-2513 (1989)
DL	M. Barinaga, "Death Gives Birth to the Nervous System, But How?", Science, 259, pp. 762-763 (1993)
DL	P. Bartlett et al., "CAVEAT: A Program to Facilitate the Structure-derived Design of Biologically Active Molecules", Molecular Recognition: Chemical and Biochemical Problems, 78, pp. 182-196 (1989)
DL	P. Bender & J. Lee, "Pharmacological Modulation of Interleukin-1", Annu. Rep. Med. Chem., 25, pp. 185-193 (1989)
DL	R. Black et al., "Activation of Interleukin-1β by a Co-induced Protease", FEBS Lett, 247, pp. 386-390 (1989)
DL	H. Böhm, "The Computer Program LUDI: A New Method for the De Novo Design of Enzyme Inhibitors", J. Comput. Aided Mol. Des., 6, pp. 61-78 (1992)
DL	J. Breitner et al., "Inverse Association of Anti-inflammatory Treatments and Alzheimer's Disease: Initial Results of a Co-twin Control Study", Neurology, 44, pp. 227-232 (1994)
DL	B. Brooks et al., "CHARMM: A Program for Macromolecular Energy, Minimization, and Dynamics Calculations", J. Comput. Chem., 4, pp. 187-217 (1983)
DL	A. Brünger, "Extension of Molecular Replacement: A New Search Strategy Based on Patterson Correlation Refinement", Acta Crystallogr. A 46, pp. 46-57 (1990)
DL	A. Brünger & A. Krukowski, "Slow-Cooling Protocols for Crystallographic Refinement by Simulated Annealing", Acta Crystallogr. A 46, pp. 585-593 (1990)
DL	U. Burkert & N. Allinger, "Methods for the Computation of Molecular Geometry" in Molecular Mechanics, pp. 59-78 (1982)

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
DL	M. Carson, "Ribbons 2.0", J. App. Crystallogr., 24, pp. 958-961 (1991)
DL	F. Casano et al., "The Structure and Complete Nucleotide Sequence of the Murine Gene Encoding Interleukin-1β Convertin Enzyme (ICE)", Genomics, 20, pp. 474-481 (1994)
DL	D. Cerretti et al., "Molecular Cloning of the Interleukin-1β Converting Enzyme", Science, 256, pp. 97-100 (1992)
DL	K. Chapman, "Synthesis of a Potent, Reversible Inhibitor of Interleukin-1β Converting Enzyme", Bioorg. Med. Chem. Lett., 2, pp. 613-618 (1992)
DL	N. Cohen, "Drug Design in Three Dimensions", Advances in Drug Research, 14, pp. 41-145 (1985)
DL	N. Cohen, "Rational Drug Design and Molecular Modeling", Drugs of the Future, 10, pp. 311-328 (1985)
DL	N. Cohen et al., "Molecular Modeling Software and Methods for Medicinal Chemistry", J. Med. Chem., 33, pp. 883-894 (1990)
DL	D. Davies & D. Segal, "Protein Crystallization: Micro Techniques Involving Vapor Diffusion", Methods Enzymol, 22, pp. 266-269 (1971)
DL	K. Dill, "Dominant Forces in Protein Folding", Biochemistry, 29, pp. 7133-7155 (1990)
DL	C. Dinarello, "Role of Interleukin-1 in Infectious Diseases", Immunol. Rev., 127, pp. 119-146 (1992)
DL	C. Dinarello et al., "Anticytokine Strategies in the Treatment of the Systemic Inflammatory Response Syndrome", J. Am. Med. Assoc., 269, pp. 1829-1835 (1993)
DL	R. Dolle et al., "Aspartyl α-((Diphenylphosphinyl)oxy)methyl Ketones as Novel Inhibitors of Interleukin-1β Converting Enzyme. Utility of the Diphenylphosphinic Acid Leaving Group for the Inhibition of Cysteine Proteases", J. Med. Chem., 38, pp. 220-222 (1995)
DL	R. Dolle et al., "Aspartyl α((1-Phenyl-3-(trifluoromethyl)-pyrazol-5-yl)oxy)methyl Ketones as Interleukin-1β Converting Enzyme Inhibitors. Significance of the P_1 and P_3 Amido Nitrogens for Enzyme-Peptide Inhibitor Binding", J. Med. Chem., 37, pp. 3863-3865 (1994)
DL	R. Dolle et al., "P_1 Aspartate-Based Peptide α-((2,6-Dichlorobenzoyl)oxy)methyl Ketones as Potent Time-Dependent Inhibitors of Interleukin-1β-Converting Enzyme" J. Med. Chem., 37, pp. 563-564 (1994)
DL	S. Ealick et al., "Application of Crystallographic and Modeling Methods in the Design of Purine Nucleoside Phosphorylase Inhibitors", Proc. Natl. Acad. Sci. USA, 88, pp. 11540-11544 (1991)
DL	P. Edwards et al., "Design, Synthesis, and Kinetic Evaluation of a Unique Class of Elastase Inhibitors, the Peptidyl α-Ketobenzoxazoles, and the X-ray Crystal Structure of the Covalent Complex between Porcine Pancreatic Elastase and Ac-Ala-Pro-Val-2-Benzoxazole", J. Am. Chem. Soc., 114, pp. 1854-1863 (1992)
DL	H. Eklund et al.. "Three-dimensional Structure of Horse Liver Alcohol Dehydrogenase at 2.4 Å Resolution", J. Mol. Biol., 102, pp. 27-59 (1976)

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	P.R. Elford, et al., "Reduction of Inflammation and Pyrexia in the Rat by Oral Administration of SDZ 224-015, an Inhibitor of the Interleukin-1β Converting Enzyme", British Journal of Pharmacology, 115, pp. 601-606 (1995)
DL	J. Erickson et al., "Design, Activity, and 2.8 Å Crystal Structure of a C_2 Symmetric Inhibitor Complexed to HIV-1 Protease", Science, 249, pp. 527-533 (1990)
DL	T. -P.D. Fan et al., "Stimulation of Angiogenesis by Substance P and Interleukin-1 in the Rat and Its Inhibition by NK_1 or Interleukin-1 Receptor Antagonists" Br. J. Pharmacol., 110, 43-49 (1993)
DL	I. Fauszt et al., "Inhibition of Interleukin-1β Converting Enzyme by Peptide Derivatives", Proc. of the 13th Am. Peptide Symp., June 20-25, 1993; Hodges, R.S. and Smith, J.A., Eds., Peptides, pp. 589-591 (1994)
DL	D.S. Fletcher, et al., "A Synthetic Inhibitor of Interleukin-1β Converting Enzyme Prevents Endotoxin-Induced Interleukin-1β Production In Vitro and In Vivo", J. Interfer. Cytokine Res., 15, pp. 243-248 (1995)
DL	V. Gagliardini et al., "Prevention of Vertebrate Neuronal Death by the crmA Gene", Science, 263, pp. 826-828 (1994)
DL	T. Geiger et al., "Neutralization of Interleukin-1β Activity in vivo with a Monoclonal Antibody Alleviates Collagen-induced Arthritis in DBA/1 Mice and Prevents the Associated Acute-phase Response", Clin. Exp. Rheumatol, 11, pp. 515-523 (1993)
DL	A. Giannis & T. Kolter, "Peptidomimetics for Receptor Ligands-Discovery, Development, and Medical Perspectives", Agnew. Chem. Int. Ed. Engl. 32, pp. 1244-1267 (1993)
DL	P. Goodford, "A Computational Procedure for Determining Energetically Favorable Binding Sites on Biologically Important Macromolecules", J. Med. Chem., 28, pp. 849-857 (1985)
DL	D. Goodsell & A. Olson, "Automated Docking of Substrates to Proteins by Simulated Annealing", Proteins: Structure, Function, and Genetics, 8, pp. 195-202 (1990)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	T. Graybill et al., "The Preparation and Evaluation of Peptidic Aspartyl Hemiacetals as Reversible Inhibitors of ICE", Am. Chem. Soc. Abs. (206th Natl. Mtg.), MEDI 235 (1993)
DL	T. Graybill, et al., "Preparation and Evaluation of Peptidic Aspartyl Hemiacetals as Reversible Inhibitors of Interleukin-1β Converting Enzyme (ICE)", Int. J. Peptide Protein Res., 44, pp. 173-182 (1994)
DL	W. Griffin et al., "Brain Interleukin 1 and S-100 Immunoreactivity are Elevated in Down Syndrome and Alzheimer Disease", Proc. Natl. Acad. Sci USA, 86, pp. 7611-7615 (1989)
DL	C. Hammerberg et al., "Interleukin-1 Receptor Antagonist in Normal and Psoriatic Epidermis", J. Clin. Invest., 90, pp. 571-583 (1992)

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	S. Hanessian et al., "Design and Synthesis of a Prototype Model Antagonist of Tachykinin NK-2 Receptor" Bioorg. Med. Chem. Lett., 4, 1397-1400 (1994)
DL	E. Harris, "Rheumatoid Arthritis: Pathophysiology and Implications for Therapy", N. Eng. J. Med., 322, pp. 1277-1289 (1990)
DL	W. Hendrickson et al., "Selenomethionyl Proteins Produced for Analysis by Multiwavelength Anomalous Diffraction (MAD): A Vehicle for Direct Determination of Three-dimensional Structure", EMBO J., 9, pp. 1665-1672 (1990)
DL	R. Hirschmann et al., "The First Design and Synthesis of a Steroidal Peptidomimetic. The Potential Value of Peptidomimetics in Elucidating the Bioactive Conformation of Peptide Ligands", J. Am. Chem. Soc., 114, pp. 9699-9701 (1992)
DL	R. Hirschmann et al., "Nonpeptidal Peptidomimetics with a β-D-Glucose Scaffolding. A Partial Somatostatin Agonist Bearing a Close Structural Relationship to a Potent, Selective Substance P Antagonist", J. Am. Chem. Soc., 114, pp. 9217-9218 (1992)
DL	A. Holmgren et al., "Three-dimensional Structure of Escherichia coli Thioredoxin-$S_2$to 2.8Å Resolution", Proc. Natl. Acad. Sci. USA, 72, pp. 2305-2309 (1975)
DL	A. Hopfinger, "Computer-Assisted Drug Design", J. Med. Chem., 28, pp. 1133-1139 (1985)
DL	A. Hopfinger & B. Burke, "Molecular Shape Analysis: A Formalism to Quantitatively Establish Spatial Molecular Similarity", Concepts and Applications of Molecular Similarity, pp. 173-209 (M. Johnson & G. Maggiora eds., 1990)
DL	A. Howard et al., "High-Level Production and Characterization of Functional Human Interleukin-1β Converting Enzyme in Baculovirus and E.coli Expression Systems", J. Cell. Biochem. Suppl., 17B, p. 146 (1993)
DL	A. Howard et al., "Human Interleukin-1β Converting Enzyme: A Mutational Analysis of Proenzyme Activation", J. Cell. Biochem. Suppl., 17B, p. 113 (1993)
DL	A. Howard et al., "IL-1-Converting Enzyme Requires Aspartic Acid Residues for Processing of the IL-1β Precursor at Two Distinct Sites and Does Not Cleave 31-kDa IL-1α", J. Immunol., 147, pp. 2964-2969 (1991)
DL	I. Kamphuis et al., "Thiol Proteases: Comparative Studies Based on the High-resolution Structures of Papain and Actinidin, and on Amino Acid Sequence Information for Cathepsins B and H, and Stem Bromelain", J. Mol. Biol., 182, pp. 317-329 (1985)
DL	J. Knowles, "Tinkering with Enzymes: What are We Learning?", Science, 236, pp. 1252-1258 (1987)
DL	M. Kostura et al., "Identification of a Monocyte Specific Pre-Interleukin 1β Convertase Activity", Proc. Natl. Acad. Sci. USA, 86, pp. 5227-5231 (1989)
DL	K. Kuida et al., "Altered Cytokine Export and Apoptosis in Mice Deficient in Interleukin-1β Converting Enzyme, Science, 267, pp. 2000-2003 (1995)

EXAMINER David Lutter DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	I. Kuntz et al., "A Geometric Approach to Macromolecule-Ligand Interactions", J. Mol. Biol., 161, pp. 269-288 (1982)
DL	E. Lattman, "Use of the Rotation and Translation Functions", Methods Enzymol., 115, pp. 55-77 (1985)
DL	P. Li et al., "Mice Deficient in IL-1β-Converting Enzyme are Defective in Production of Mature IL-1β and Resistant to Endotoxic Shock", Cell, 80, pp. 401-411 (1995)
DL	C. Lipinski, "Bioisosterism in Drug Design", Annu. Rep. Med. Chem., 21, pp. 283-291 (1986)
DL	G. Lonnemann et al., "Differences in the Synthesis and Kinetics of Release of Interleukin 1α, Interleukin 1β and Tumor Necrosis Factor from Human Mononuclear Cells", Eur. J. Immunol., 19, pp. 1531-1536 (1989)
DL	A. MacKenzie et al., "An Inhibitor of the Interleukin-1β-Processing Enzyme Blocks IL-1 Release and Reduces Pyrexia and Acute Inflammation", Inflammation Research Association (7th Internat. Conf.), W42 (1994)
DL	T. Mandrup-Poulsen et al., "Involvement of Interleukin 1 and Interleukin 1 Antagonist in Pancreatic β-Cell Destruction in Insulin-dependent Diabetes Mellitus", Cytokine, 5, pp. 185-191 (1993)
DL	C. March et al., "Cloning, Sequence and Expression of Two Distinct Human Interleukin-1 Complementary DNAs", Nature, 315, pp. 641-647 (1985)
DL	G. Marshall, "Computer-Aided Drug Design", Annu. Rev. Pharmacol. Toxicol., 27, pp. 193-213 (1987)
DL	G. Marshall & I. Motoc, "Approaches to the Conformation of the Drug Bound to the Receptor", Molecular Graphics and Drug Design, pp. 115-156 (A. Burgen et al. eds., 1986)
DL	Y. Martin, "3D Database Searching in Drug Design", J. Med. Chem., 35, pp. 2145-2154 (1992)
DL	J. Marx, "Cell Death Studies Yield Cancer Clues", Science, 259, pp. 760-761 (1993)
DL	D. Mayer et al., "A Unique Geometry of the Active Site of Angiotension-Converting Enzyme Consistent with Structure-Activity Studies", J. Comput. Aided Mol. Des., 1, pp. 3-16 (1987)
DL	R. Ménard et al., "Contribution of the Glutamine 19 Side Chain to Transition-State Stabilization in the Oxyanion Hole of Papain", Biochemistry, 30, pp. 8924-8928 (1991)
DL	R. Ménard et al., "Importance of Hydrogen-Bonding Interactions Involving the Side Chain of Asp 158 in the Catalytic Mechanism of Papain", Biochemistry, 30, PP. 5531-5538 (1991)
DL	E. Meng et al., "Automated Docking with Grid-Based Energy Evaluation", J. Comput. Chem., 13, pp. 505-524 (1992)
DL	B. Miller et al., "Inhibition of Mature IL-1β Production in Murine Macrophages and a Murine Model of Inflammation by WIN 67694, an Inhibitor of IL-1β Converting Enzyme[1]", J. Immunol., 154, pp. 1331-1338 (1995)
DL	D. Miller et al., "The IL-1β Converting Enzyme as a Therapeutic Target", Ann. N.Y. Acad. Sci., 696, pp. 133-148 (1993)

EXAMINER David Lutter DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	S. Miller et al., "The Accessible Surface Area and Stability of Oligomeric Proteins", Nature, 328, pp. 834-836 (1987)
DL	A. Miranker & M. Karplus, "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method", Proteins: Structure, Function, and Genetics, 11, pp. 29-34 (1991)
DL	M. Miura et al., "Induction of Apoptosis in Fibroblasts by IL-1β-Converting Enzyme, a Mammalian Homolog of the C. elegans Cell Death Gene ced-3", Cell, 75, pp. 653-660 (1993)
DL	A.M.M. Mjalli et al., "Activated Ketones as Potent Reversible Inhibitors of Interleukin-1β Converting Enzyme", Bioorg. Med. Chem. Lett., 4, pp. 1965-1968 (1994)
DL	A.M.M Mjalli. et al., "Phenylalkyl Ketones as Potent Reversible Inhibitors of Interleukin-1β Converting Enzyme," Bioorg. Med. Chem. Lett., 3, pp. 2689-2692 (1993)
DL	S. Molineaux et al., "Interleukin 1β (IL-1β) Processing in Murine Macrophages Requires a Structurally Conserved Homologue of Human IL-1β Converting Enzyme", Proc. Natl. Acad. Sci. USA, 90, pp. 1809-1813 (1993)
DL	B. Mosley et al., "Determination of the Minimum Polypeptide Lengths of the Functionally Active Sites of Human Interleukins 1α and 1β", Proc. Natl. Acad. Scie. USA, 84, pp. 4572-4576 (1987)
DL	M.D. Mullican et al., "The Synthesis and Evaluation of Peptidyl Aspartyl Aldehydes as Inhibitors of ICE" Bioorg. Med. Chem. Lett., 4, 2359-2364 (1994)
DL	C.M. Nalin, "Apoptosis Research Enters the ICE Age," Structure, 3, pp. 143-145 (1995)
DL	M. Navia & M. Murcko, " Use of Structural Information in Drug Design", Curr. Opin. Struc. Biol., 2, pp. 202-210 (1992)
DL	M. Nett et al., "Molecular Cloning of the Murine IL-1β Converting Enzyme cDNA", J. Immunol., 149, pp. 3254-3259 (1992)
DL	M. Nett-Fiordalisi et al., "Characterization and Activation of the Murine Interleukin-1β (IL-1β) Converting Enzyme", J. Cell. Biochem. Suppl., 17B, p. 117 (1993)
DL	Y. Nishibata & A. Itai, "Automatic Creation of Drug Candidate Structures Based on Receptor Structure. Starting Point for Artificial Lead Generation", Tetrahedron, 47, pp. 8985-8990 (1991)
DL	C. Noren et al., "A General Method for Site-Specific Incorporation of Unnatural Amino Acids into Proteins, Science,. 244, pp. 182-188 (1989)
DL	I. Noronha et al., "In situ Production of TNF-α, IL-1β and IL-2R in ANCA-positive Glomerulonephritis", Kidney Int., 43, pp. 682-692 (1993)
DL	K. Ohlsson et al., "Interleukin-1 Receptor Antagonist Reduces Mortality from Endotoxin Shock", Nature, 348, pp. 550-552 (1990)
DL	J. Oppenheim et al., "There is More than One Interleukin 1", Immunol. Today, 7, pp. 45-56 (1986)

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
		FILING DATE June 21, 2001	GROUP 1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	M. Pennington & N. Thornberry, "Synthesis of a Fluorogenic Interleukin-1β Converting Enzyme Substrate Based on Resonance Energy Transfer", Pept. Res., 7, pp. 72-76 (1994)
DL	R. Peters & R. McKinstry, "Three-Dimensional Modeling and Drug Development: Has "Rational" Drug Design Arrived?" Biotechnology, 12, pp. 147-150 (1994)
DL	J. Plattner & D. Norbeck, "Obstacles to Drug Development from Peptide Leads", in Drug Discovery Technologies, pp. 92-126 (C. Clark & W. Moss eds., 1990)
DL	L. Polgár, "On the Mode of Activation of the Catalytically Essential Sulfhydryl Group of Papain", Eur. J. Biochem., 33, pp. 104-109 (1973)
DL	C. Prasad et al., "P_1 Aspartate-Based Peptide α-Arylacyloxy- and α-Aryloxymethyl Ketones as Potent Time-Dependent Inhibitors of Interleukin-1β Converting Enzyme", Am. Chem. Soc. Abs. (24th Med. Chem. Symp.), 66 (1994)
DL	C. Ray et al., "Viral Inhibition of Inflammation: Cowpox Virus Encodes an Inhibitor of the Interleukin-1β Converting Enzyme", Cell, 69, pp. 597-604 (1992)
DL	L. Reiter, "Peptidic p-Nitroanilide Substrates of Interleukin-1β-Converting Enzyme", Int. J. Pept. Protein Res., 43, pp. 87-96 (1994)
DL	L. Revesz et al., "Synthesis of P1 Aspartate-Based Peptide Acyloxymethyl and Fluoromethyl Ketones as Inhibitors of Interleukin-1β-Converting Enzyme", Tetrahedron Lett., 35, pp. 9693-9696 (1994)
DL	C. Ring et al., "Structure-based Inhibitor Design by Using Protein Models for the Development of Antiparasitic Agents", Proc. Natl. Acad. Sci. USA, 90, pp. 3583-3587 (1993)
DL	R.P. Robinson and K.M. Donahue, "Synthesis of a Peptidyl Difluoro Ketone Bearing the Aspartic Acid Side Chain: An Inhibitor of Interleukin-1β Converting Enzyme" J. Org. Chem., 57, 7309-7314 (1992)
DL	M.J. Salvatore et al., "L-741,494, A Fungal Metabolite that is an Inhibitor of Interleukin-1β Converting Enzyme," J. Nat. Prods., 57, 755-760 (1994)
DL	J. Sandberg et al., "Treatment with an Interleukin-1 Receptor Antagonist Protein Prolongs Mouse Islet Allograft Survival", Diabetes, 42, pp. 1845-1851 (1993)
DL	I. Schechter & A. Berger, "On the Size of the Active Site in Proteases. I. Papain", Biochem. Biophys. Res. Commun., 27, pp. 157-162 (1967)
DL	S. Schmidt et al., "Synthesis and Evaluation of Aspartyl α-Chloro-, α-Aryloxy-, and α-Arylacyloxymethyl Ketones as Inhibitors of Interleukin-1β Converting Enzyme", Am. Chem. Soc. Abs. (208th ACS Natl. Mtg.), MEDI 4, (1994)
DL	B. Shivers et al., "Molecular Cloning of Rat Interleukin-1β-Converting Enzyme: Distribution and Regulation", J. Cell. Biochem. Suppl., 17B, p. 119 (1993)
DL	I. Singer et al., "Interleukin 1β is Localized in the Cytoplasmic Ground Substance but is Largely Absent from the Golgi Apparatus and Plasma Membranes of Stimulated Human Monocytes", J. Exp. Med., 167, pp. 389-407 (1988)

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VPI/94-04 CIP2 DIV5	SERIAL NO. 09/886,773
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Guy W. Bemis, et al.	
	FILING DATE June 21, 2001	GROUP 1653

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
DL	P. Sleath et al., "Substrate Specificity of the Protease that Processes Human Interleukin-1β, J. Biol. Chem., 265, pp. 14526-14528 (1990)
DL	A.F. Spatola, in "Chemistry and Biochemistry of Amino Acids, Peptides, and Proteins," , 7, ch. 5, pp. 267-281, Weinstein, B., ed., Marcel Dekker, Inc., New York (1983)
DL	R. Taylor & O. Kennard, "Hydrogen-Bond Geometry in Organic Crystals", Acc. Chem. Res., 17, pp. 320-326 (1984)
DL	C. Thornber, "Isosterism and Molecular Modification in Drug Design", Chem. Soc. Rev., 8, pp. 563-580 (1979)
DL	N. Thornberry et al., "A Novel Heterodimeric Cysteine Protease is Required for Interleukin-1β Processing in Monocytes", Nature, 356, pp. 768-774 (1992)
DL	N. Thornbery et al., "Inactivation of Interleukin-1β Converting Enzyme by Peptide (Acyloxy) methyl Ketones", Biochemistry, 33, pp. 3934-3940 (1994)
DL	J. Travis, "Proteins and Organic Solvents Make an Eye-Opening Mix", Science, 262, p. 1374 (1993)
DL	J. Uhl et al., "Secretion of Human Monocyte Mature IL-1β: Optimization of Culture Conditions and Inhibition by ICE Inhibitors", Inflammation Res., 44, pp. S211-S212 (1995)
DL	P. Warner, et al., "PYI Idone HLE Inhibitors: Variation of the 3 and 5 Substituents", Royal Soc. Chem. Abs. (7th RSC-SCI Med. Chem. Symp.), P23 (1993)
DL	S. Weiner et al. "A New Force Field for Molecular Mechanical Simulation of Nucleic Acids and Proteins", J. Am. Chem. Soc., 106, pp. 765-784 (1984)
DL	C. Wong & J. McCammon, "Dynamics and Design of Enzymes and Inhibitors", J. Am. Chem. Soc., 108, pp. 3830-3832 (1986)
DL	P. Wooley et al., "The Effect of an Interleukin-1 Receptor Antagonist Protein on Type II Collagen-induced Arthritis and Antigen-induced Arthritis in Mice", Arthritis Rheum., 36, pp. 1305-1314 (1993)
DL	J. Yuan et al., "The C. elegans Cell Death Gene ced-3 Encodes a Protein Similar to Mammalian Interleukn-1β-Converting Enzyme", Cell, 75, pp. 641-652 (1993)

EXAMINER David Lutton DATE CONSIDERED 6/13/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.